

We claim:

1. An apparatus for treating a body of water which is comprised of a floating platform, means for generating millimeter wave electromagnetic radiation connected to said floating platform, a transmitting antenna disposed below said floating platform, a receiving antenna disposed above said floating platform, waveguide means for conveying said millimeter wave electromagnetic energy from said means for generating millimeter wave electromagnetic radiation to said transmitting antenna, and a power supply operatively connected to said means for generating said millimeter wave electromagnetic radiation.
2. The apparatus as recited in claim 1, wherein said floating platform is comprised of material with a specific gravity of less than about 1.0 gram per cubic centimeter.
3. The apparatus as recited in claim 2, wherein said floating platform consists essentially of material with a specific gravity of less than about 1.0 gram per cubic centimeter.
4. The apparatus as recited in claim 3, wherein said floating platform consists essentially of foam material.
5. The apparatus as recited in claim 4, wherein said foam material is expanded cellular polystyrene.
6. The apparatus as recited in claim 1, wherein said transmitting antenna is a microwave horn antenna.
7. The apparatus as recited in claim 6, wherein said transmitting antenna emits continuous waves in the millimeter wave range of from about 4.6 to about 6.7 millimeters.
8. The apparatus as recited in claim 7, wherein said transmitting antenna emits continuous waves with a power of from about 20 to about 60 milliwatts.

9. The apparatus as recited in claim 8, wherein said transmitting antenna emits continuous waves with a power of from about 30 to about 50 milliwatts.
10. The apparatus as recited in claim 9, wherein said transmitting antenna is covered with a waterproof, plastic material.
11. The apparatus as recited in claim 1, wherein said power supply is comprised of a multiplicity of batteries.
12. The apparatus as recited in claim 11, wherein said power supply supplies about 5.0 volts of direct current.
13. The apparatus as recited in claim 1, wherein said waveguide is a hermetic waveguide.
14. The apparatus as recited in claim 13, wherein said waveguide is comprised of a cylindrical housing.
15. The apparatus as recited in claim 14, wherein an optical fiber is disposed within said cylindrical housing.
16. The apparatus as recited in claim 1, wherein said floating platform is in the shape of a truncated cylinder.

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